

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets

(11)



EP 0 749 872 A3

(12)

EUROPEAN PATENT APPLICATION

(88) Date of publication A3:
15.03.2000 Bulletin 2000/11

(51) Int. Cl.⁷: B60R 21/20

(43) Date of publication A2:
27.12.1996 Bulletin 1996/52

(21) Application number: 96109990.0

(22) Date of filing: 20.06.1996

(84) Designated Contracting States:
DE FR GB

- Hanabusa, Hisao
Bisai-shi, Aichi (JP)
- Nagano, Akiyoshi
Ama-gun, Aichi (JP)
- Fujii, Tetsuya
Nishikasugai-gun, Aichi (JP)
- Katagiri, Katsuhiko
Kakamigahara-shi, Gifu (JP)
- Furuta, Kenichi
Tajimi-shi, Gifu (JP)
- Yamazaki, Yoshio
Inabe-gun, Mie (JP)

(30) Priority: 21.06.1995 JP 15488495
21.06.1995 JP 15489795
21.06.1995 JP 15491195
31.07.1995 JP 19497095
11.08.1995 JP 20565795

(71) Applicant:
TOYODA GOSEI CO., LTD.
Nishikasugai-gun Aichi-ken (JP)

(72) Inventors:

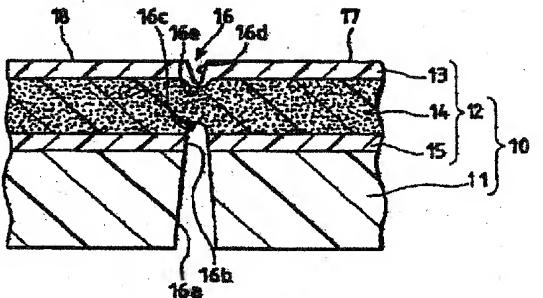
- Yamasaki, Chiho
Kasugai-gun, Aichi (JP)
- Totani, Chiharu
Gifu-shi, Gifu (JP)
- Ueno, Shigejiro
Kasugai-shi, Aichi (JP)

(74) Representative:
Koepe, Gerd L., Dipl.-Chem.
Blumbach, Kramer & Partner GbR,
Patentanwälte,
Radeckestrasse 43
81245 München (DE)

(54) Air bag cover and manufacturing method for same

(57) An air bag cover and manufacturing method thereof wherein the air bag cover comprises a core member (11) which can be formed by injection molding, and a decorative sheet (12) disposed on the surface of the core member. The decorative sheet includes at least two layers, an outer layer (13) and a barrier layer (15) disposed on a back side of the outer layer to protect the outer layer when the core member is injection molded. The core member is made of thermoplastic elastomer which can be thermally fused to the barrier layer. A breakable portion (16) is provided in the barrier layer and core member.

FIG. 1



EP 0 749 872 A3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number

EP 96 10 9990

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (B6CLC)		
X	PATENT ABSTRACTS OF JAPAN vol. 617, no. 679 (M-1527), 14 December 1993 (1993-12-14) & JP 05 229367 A (KANSEI CORP), 7 September 1993 (1993-09-07) * abstract; figures 2-7 *	1,23,24	B60R21/20		
Y	---	12-16, 18,21 5-7,22			
A	---				
Y	US 5 084 122 A (SOGI HIDEHITO ET AL) 28 September 1994 (1994-09-28) * column 1, line 55 - column 2, line 5 * * column 2, line 45 - line 52 * * column 2, line 62 - column 3, line 59; figures 2-4 *	12-16, 18,21			
A	---	3			
D,X	US 5 395 668 A (ITO KEIZOU ET AL) 7 March 1995 (1995-03-07) * column 1, line 44 - line 60 * * column 2, line 38 - line 56 * * column 3, line 28 - line 47 *	12,13,16			
A	PATENT ABSTRACTS OF JAPAN vol. 617, no. 438 (M-1468), 10 August 1993 (1993-08-10) & JP 05 892745 A (NIPPON PLAST CO LTD), 16 April 1993 (1993-04-16) * abstract *	1-3, 18-14			
A	GB 2 276 354 A (KLIPPAN AUTOLIV SNC) 28 January 1992 (1992-01-28) * page 3, paragraph 3 - page 4, paragraph 1 * * page 4, paragraph 7 - paragraph 8 * * page 6, paragraph 2 - page 9, paragraph 3; figures 2,3 *	12,17,19			
	---	-/-			
The present search report has been drawn up for all claims					
Place of search	Date of compilation of the search	Examiner			
THE HAGUE	30 November 1999	Peltz, P			
CATEGORY OF CITED DOCUMENTS					
X : particularly relevant if taken alone. Y : particularly relevant if combined with another document of the same category A : technological background C : cross-referenced documents P : intermediate document					
T : theory or principle underlying the invention E : earlier printed document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons R : member of the same patent family, corresponding document					

European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 96 16 9998

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (BLCI)
P,X	GB 2 289 644 A (PETRI AG) 29 November 1995 (1995-11-29) * page 2, last paragraph - page 3, paragraph 1 * * page 4, paragraph 2 - page 6, paragraph 1; figures 7,9 *	1,2,5,6, 23	
A	-----	3,18, 12-16	
P,A	EP 0 714 817 A (MORTON INT INC) 5 June 1996 (1996-06-05) * column 4, line 44 - column 5, line 29 * * column 5, line 49 - line 58; figure 6 *	1-3,18, 11,23,24	
E	EP 0 748 722 A (TOYODA GOSEI KK) 18 December 1996 (1996-12-18) * column 3, line 54 - column 4, line 6 * * column 7, line 39 - column 9, line 3 * * column 11, line 36 - line 51 * * column 14, line 42 - column 16, line 14; figures 8,17 *	1-7,18, 12-17	

TECHNICAL FIELDS SEARCHED (BLCI)			

The present search report has been drawn up for all claims			
Place of search	Date of completion of the search	Examiner	
THE HAGUE	30 November 1999	Peltz, P	
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons R : member of the same patent family, corresponding document	

ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.

EP 96 18 9998

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
 The members are as contained in the European Patent Office EDP file on
 The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

30-11-1999

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
JP 05229367	A	07-09-1993	NONE	
US 5884122	A	28-01-1992	NONE	
US 5395668	A	07-03-1995	JP 4110117 A JP 7867711 B JP 5162603 A DE 69109780 D DE 69109780 T EP 6475198 A	18-04-1992 26-07-1995 29-06-1993 22-06-1995 15-02-1996 18-03-1992
JP 05092745	A	16-04-1993	JP 2502847 B	29-05-1996
GB 2276354	A	28-09-1994	DE 4469405 A	29-09-1994
GB 2289644	A	29-11-1995	DE 4417952 A BR 9502497 A ES 2122871 A FR 2720043 A JP 7323881 A US 5845929 A	23-11-1995 02-01-1996 16-12-1998 24-11-1995 12-12-1995 08-12-1998
EP 0714817	A	05-06-1996	JP 8207687 A US 5533748 A US 5728342 A	13-08-1996 09-07-1996 17-03-1998
EP 0748722	A	18-12-1996	JP 9602187 A JP 9602188 A JP 9156444 A JP 9156448 A US 5865461 A	07-01-1997 07-01-1997 17-06-1997 17-06-1997 02-02-1999